



PUBLIC RESOURCES ADVISORY GROUP

Draft

MEMORANDUM TO: The Honorable Seth Magaziner

General Treasurer State of Rhode Island

FROM: Public Resources Advisory Group ("PRAG")

SUBJECT: General Obligation Debt Capacity for FY2017

DATE: August 2, 2016

As requested, Public Resources Advisory Group has analyzed the impact on the State of Rhode Island's debt ratios assuming the issuance of the enacted FY2017 Capital Development Program of \$227,500,000. The analysis is based on the current Public Finance Management Board's credit guidelines of (i) tax-supported debt to personal income in the range of 5.0% to 6.0% and (ii) annual tax-supported debt service to general revenues not to exceed 7.5%. For this analysis, we have included the State's outstanding general obligation debt, lease participation certificates and tax-supported Commerce Corporation debt and Convention Center Authority debt. We have also used the latest projections for general revenues through 2021 and personal income through 2023. Additionally, the State currently has \$319,575,000 of general obligation debt and \$219,210,000 appropriation debt authorized but unissued. If we assume the passage of the November referenda, the State will have a total of \$766,285,000 of authorized but unissued tax-supported debt.

PRAG made the following assumptions to estimate the impact on the debt ratios:

- 1. General obligation authorized but unissued debt totaling \$547,075,000 is issued in equal annual amounts starting in 2017 through 2021.
- 2. Debt subject to appropriation authorized but unissued debt of \$219,210,000 is issued in equal annual amounts from 2017 through 2021.
- 3. All debt will be issued as 20-year debt.
- 4. Interest rate is based on the 60-month average of the double-A MMD for a twenty year maturity plus 50 basis points (3.66%) for general obligation debt and plus 75 basis points (3.91%) for debt subject to appropriation.
- 5. There are no refunding savings during the period.
- 6. General revenue growth after 2021 of 0.50%.
- 7. Personal income growth after 2023 of 3.00%.

Based on the State's tax-supported debt currently outstanding, the ratio of tax-supported debt service to revenues peaks in FY2018 at 6.37% and the ratio of tax-supported debt to personal income is at its highest level in FY2017 at 3.10%. See Table 1 for the State's debt ratios for currently outstanding tax-supported debt.

Table 2 shows the impact on the State's debt ratios if all of the currently authorized but unissued tax-supported debt and the additional \$227,500,000 in the enacted FY2017 Capital Development Program are issued. Based on the assumptions described above, we estimate after the issuance of all the debt, the ratio of debt service to revenues will peak in FY2023 at 6.59%, well below the 7.50% PFMB credit guideline and the debt to personal income stays below 3.10%, well under the 5.0% to 6.0% PFMB credit guideline range. We also looked at the debt ratios with higher interest rates for the new debt (+100 basis points over the 60-month average double-A 20-year MMD) and if revenues and personal income are at 95% of the current projections. The debt ratios in all these cases are below the PFMB credit guidelines.



Table 1. Outstanding Tax-Supported Debt and PFMB Credit Guidelines

Outstanding Tax-Supported Debt Service

Debt Service to General Revenues Less Than 7.5% Tax-Supported Debt to Personal Income: 5.0% to 6.0%

							Tax-Supported
					Outstanding Tax-		Debt to
Fiscal				General	Supported DS to		Personal
Year	Principal	Interest	Debt Service	Revenues	Revenues	Personal Income	Income
2017	130,730,759	83,148,554	213,879,313	3,674,742,668	5.82%	56,094,000,000	3.10%
2018	160,883,361	77,158,519	238,041,880	3,737,237,978	6.37%	58,565,000,000	2.75%
2019	145,647,368	69,263,081	214,910,449	3,745,894,748	5.74%	60,874,000,000	2.38%
2020	153,031,708	62,073,678	215,105,386	3,794,833,717	5.67%	62,726,000,000	2.08%
2021	150,994,658	54,719,795	205,714,453	3,847,663,594	5.35%	64,566,000,000	1.78%
2022	132,853,928	47,732,626	180,586,554	3,866,901,912	4.67%	66,610,000,000	1.50%
2023	159,705,655	41,381,021	201,086,676	3,886,236,422	5.17%	68,755,000,000	1.26%
2024	128,310,827	43,016,928	171,327,755	3,905,667,604	4.39%	70,817,000,000	1.00%
2025	111,634,697	27,966,500	139,601,197	3,925,195,942	3.56%	72,941,000,000	0.79%
2026	105,182,537	22,646,605	127,829,142	3,944,821,921	3.24%	75,129,000,000	0.62%
2027	90,759,641	17,659,329	108,418,970	3,964,546,031	2.73%	77,382,000,000	0.47%
2028	58,185,000	12,439,973	70,624,973	3,984,368,761	1.77%	79,703,000,000	0.34%
2029	43,785,000	9,917,812	53,702,812	4,004,290,605	1.34%	82,094,000,000	0.26%
2030	43,385,000	7,591,012	50,976,012	4,024,312,058	1.27%	84,556,000,000	0.20%
2031	31,985,000	5,322,108	37,307,108	4,044,433,618	0.92%	87,092,000,000	0.14%
2032	33,565,000	3,750,377	37,315,377	4,064,655,786	0.92%	89,704,000,000	0.10%
2033	23,020,000	2,450,225	25,470,225	4,084,979,065	0.62%	92,395,000,000	0.07%
2034	17,910,000	1,520,056	19,430,056	4,105,403,961	0.47%	95,166,000,000	0.04%
2035	14,620,000	761,184	15,381,184	4,125,930,980	0.37%	98,020,000,000	0.02%
2036	4,805,000	144,150	4,949,150	4,146,560,635	0.12%	100,960,000,000	0.005%
	1,740,995,139	590,663,531	2,331,658,670				



Table 2. Debt Ratios with Issuance of All Authorized But Unissued Debt + November Referenda

	Outstanding Tax-Supported Debt Service			Estimated Authorized but Unissued @ 60-Month Average Double-A 20-Year MMD + 50 bps			Current Revenue Projections + 60-Month Avg Double-A 20- Year MMD + 50 bps		Current Revenue Projections + 60-Month Avg Double-A 20- Year MMD + 100 bps		95% of Revenue & 95% of Personal Income + 60-Month Avg Double-A 20-Year MMD + 100 bps		
							Total						
							Outstanding +	Total Debt	Total Debt to	Total Debt	Total Debt to	Total Debt	Total Debt to
Fiscal							Projected Debt	Service to	Personal	Service to	Personal	Service to	Personal
Year	Principal	Interest	Debt Service	Principal	Interest	Debt Service	Service	Revenues	Income	Revenues	Income	Revenues	Income
2017	130,730,759	83,148,554	213,879,313	0	0	0	213,879,313	5.82%	3.10%	5.82%	3.10%	6.13%	3.27%
2018	160,883,361	77,158,519	238,041,880	5,291,937	5,718,811	11,010,748	249,052,628	6.66%	3.01%	6.68%	3.01%	7.03%	3.17%
2019	145,647,368	69,263,081	214,910,449	10,781,274	11,240,222	22,021,496	236,931,945	6.33%	2.88%	6.35%	2.88%	6.69%	3.03%
2020	153,031,708	62,073,678	215,105,386	16,475,381	16,556,863	33,032,244	248,137,630	6.54%	2.79%	6.58%	2.79%	6.92%	2.93%
2021	150,994,658	54,719,795	205,714,453	22,381,904	21,661,088	44,042,992	249,757,445	6.49%	2.68%	6.54%	2.68%	6.89%	2.82%
2022	132,853,928	47,732,626	180,586,554	28,508,774	26,544,966	55,053,740	235,640,294	6.09%	2.57%	6.16%	2.57%	6.48%	2.71%
2023	159,705,655	41,381,021	201,086,676	29,572,282	25,481,458	55,053,740	256,140,416	6.59%	2.25%	6.66%	2.26%	7.01%	2.38%
2024	128,310,827	43,016,928	171,327,755	30,675,499	24,378,241	55,053,740	226,381,495	5.80%	1.92%	5.86%	1.93%	6.17%	2.03%
2025	111,634,697	27,966,500	139,601,197	31,819,911	23,233,829	55,053,740	194,654,937	4.96%	1.65%	5.02%	1.65%	5.29%	1.74%
2026	105,182,537	22,646,605	127,829,142	33,007,056	22,046,684	55,053,740	182,882,882	4.64%	1.41%	4.70%	1.42%	4.95%	1.49%
2027	90,759,641	17,659,329	108,418,970	34,238,531	20,815,209	55,053,740	163,472,710	4.12%	1.19%	4.19%	1.20%	4.41%	1.26%
2028	58,185,000	12,439,973	70,624,973	35,515,995	19,537,745	55,053,740	125,678,713	3.15%	1.00%	3.22%	1.01%	3.39%	1.06%
2029	43,785,000	9,917,812	53,702,812	36,841,164	18,212,576	55,053,740	108,756,552	2.72%	0.85%	2.78%	0.86%	2.92%	0.91%
2030	43,385,000	7,591,012	50,976,012	38,215,824	16,837,916	55,053,740	106,029,752	2.63%	0.73%	2.70%	0.74%	2.84%	0.78%
2031	31,985,000	5,322,108	37,307,108	39,641,824	15,411,916	55,053,740	92,360,848	2.28%	0.62%	2.35%	0.63%	2.47%	0.66%
2032	33,565,000	3,750,377	37,315,377	41,121,082	13,932,658	55,053,740	92,369,117	2.27%	0.52%	2.33%	0.53%	2.46%	0.56%
2033	23,020,000	2,450,225	25,470,225	42,655,591	12,398,149	55,053,740	80,523,966	1.97%	0.42%	2.03%	0.43%	2.14%	0.46%
2034	17,910,000	1,520,056	19,430,056	44,247,415	10,806,325	55,053,740	74,483,796	1.81%	0.34%	1.88%	0.35%	1.97%	0.37%
2035	14,620,000	761,184	15,381,184	45,898,697	9,155,043	55,053,740	70,434,924	1.71%	0.27%	1.77%	0.28%	1.86%	0.29%
2036	4,805,000	144,150	4,949,150	47,611,661	7,442,079	55,053,740	60,002,890	1.45%	0.22%	1.51%	0.22%	1.59%	0.23%
	1,740,995,139	590,663,531	2,331,658,670	614,501,801	321,411,781	935,913,582	3,267,572,252						